

**American University of Beirut
Faculty of Health Sciences**

Department of Health Promotion and Community Health

**HPCH 335
Implementation Research in Public Health
[2 Credits]**

**Course Syllabus
Fall Semester, Academic Year: 2019-2020**

Class time and location

Dates, times: Thursday, 3:30pm-5:10pm
Classroom: VD 203

Course Instructors

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Course description

This course introduces implementation research, its frameworks, methods, and applications. Through readings and case studies, students will develop an understanding of implementation strategies at the individual, organizational and policy levels, and will discuss issues related to sustainability and scaling-up. They will develop a project where they articulate an implementation research problem of importance in their context, identify implementation strategies, select the appropriate study design, and consider the ethical aspects of the work. This is a required course for all students enrolled in the graduate program on the WHO-TDR scholarship scheme.

Total Credits:2

- 1 hour 40 minutes lecture and discussion once a week.

Course learning objectives (LO)

By the end of the course, students will be able to:

- LO1. Identify implementation gaps in public health interventions in different contexts
- LO2. Formulate effective implementation research questions
- LO3. Discuss various modalities of mixed-methods research in implementation research
- LO4. Apply monitoring and evaluation methods to assess the feasibility and effectiveness of an implementation research program.
- LO5. Identify theories and frameworks used in implementation research
- LO6. Identify stakeholders barriers and facilitators in implementation of effective practices.
- LO7. Analyze secondary quantitative and qualitative data to assess the feasibility and effectiveness of the intervention

- LO8. Develop strategies to implement, sustain and scale-up effective practices in a specific setting.
- LO9. Apply a framework of ethics, equity, social/environmental justice and human rights to a health promotion research, practice, and policy.

Pre-requisites

PBHL 310
PBHL 303

HPCH Concentration Competencies mapped to HPCH 335

HPCH:

HPCH-CC1: Demonstrate a critical understanding of multidisciplinary theories/frameworks utilized in health promotion research and practice (LO5 reinforced)

HPCH-CC2: Employ theoretical knowledge and methodological skills in health promotion program planning, implementation, monitoring, and evaluation (LO 1,2,3,4,5,6,7 and 8)

HPCH-CC3: Conduct rigorous quantitative and qualitative research for health promotion (LO7 reinforced)

HPCH-CC5: Promote social justice and equity in health promotion research, practice, and policy (LO9)

Competencies of the Council on Education for Public Health (CEPH) mapped to HPCH 335

Reinforced core competencies:

CEPH CC2. Select quantitative and qualitative data collection methods appropriate for a given public health context.

CEPH CC6. Explain the critical role of evidence in advancing public health knowledge

CEPH CC9. Design a population-based policy, program, project or intervention.

CEPH CC11. Select methods to evaluate public health programs

Required readings

Readings are available open access via AUB Libraries and will be posted on Moodle

Course requirements and Student evaluations

Student Evaluation:

Table-1 Summary of students' assessments mapped to course learning objectives

Mode of Assessment of Students	Learning Objectives								
	LO1	LO2	LO3	LO4	LO5	LO6	LO7	LO8	LO9
Participation (10%)	X		X		X	X			X
In-class graded assignment: data analysis (20%)			X				X		
First section of the paper: (30%)	X	X			X	X			
Final section of the paper: (40%)			X	X				X	X

Table -2 Description of Assessment methods, Due Dates and Corresponding Learning Objectives

Assessment method	Date (tentative)	LOs covered	Grade percentage
<i>Participation in class</i>	<u><i>All sessions</i></u>	<i>LO1, LO3, LO5, LO6, LO8, LO9</i>	<i>10%</i>
Individual assessment: Students are expected to actively participate in class discussion having read the assigned materials.			
<i>Assignment 1: In-class graded assignment- data analysis</i>	<u><i>October 3</i></u>	<i>LO3, LO7</i>	<i>20%</i>
Individual assignment: Students will be provided with quantitative data and asked to conduct descriptive and simple analytical tests to identify the implementation problem or to describe specific implementation outcomes (for example fidelity). They will be asked to write a short interpretation of the data based on the research question provided.			
<i>Assignment 2: First section of the paper</i>	<u><i>October 24</i></u>	<i>LO1, LO2, LO5, LO6</i>	<i>30%</i>
Individual assignment: Students will identify an implementation gap related to a health issue based on the literature and develop an implementation research question. They will then select a framework to guide the research and discuss its components. Based on the knowledge available to them about the context through the literature they will describe the barriers and facilitators for implementation. Detailed guidelines and rubrics will be shared on Moodle.			
<i>Assignment 3: Final section of the paper</i>	<u><i>December 3</i></u>	<i>LO3, LO4, LO8, LO9</i>	<i>40%</i>
Individual assignment: Students will continue working on the paper building on the first section by selecting research methods applicable for their specific research question. In this section of the paper students need to operationalize their implementation outcomes, identify stakeholders and discuss their roles, select implementation strategies and discuss ethical considerations. Detailed guidelines and rubrics will be shared on Moodle.			

Course Policies and other General Notes:

- Students are expected to attend all lectures. Absence, whether excused or not, from any class does not excuse student from their responsibility for the work done or from any announcement made during their absence. Students who miss more than one-fifth of the sessions in the first ten weeks of the semester will lose all credit for the course and will receive a grade of W (withdraw).
- Plagiarism in produced material for the assignment is unacceptable. Students might be asked to bring proof of originality of work. If plagiarism is suspected, a failing grade may be given on the assignment. (see AUB's policy <http://pnp.aub.edu.lb/general/conductcode/158010081.html>)
- Cheating is a serious offence and will result in a failing test grade.
- Cell phones, beepers and pagers must be turned off during class and discussion; laptops can be used to make notes but not to multi-task on other assignments.
- AUB strives to make learning experiences as accessible as possible. If you anticipate or experience academic barriers due to a disability (including mental health, chronic or temporary medical conditions), please inform me immediately so that we can privately discuss options. In order to help establish reasonable accommodations and facilitate a smooth accommodations process, you are encouraged to contact the Accessible Education Office: accessibility@aub.edu.lb; +961-1-350000, x3246; West Hall, 314.
- *AUB is committed to facilitating a campus free of all forms of discrimination including sex/gender-based harassment prohibited by Title IX. The University's non-discrimination policy applies to, and protects, all students, faculty, and staff. If you think you have experienced discrimination or harassment, including sexual misconduct, we encourage you to tell someone promptly. If you speak to a faculty or staff member about an issue such as harassment, sexual violence, or discrimination, the information will be kept as private as possible, however, faculty and designated staff are required to bring it to the attention of the University's Equity/Title IX Coordinator. Faculty can refer you to fully confidential resources, and you can find information and contacts at www.aub.edu.lb/titleix. **To report an incident**, contact the University's Equity/Title IX Coordinator Ms. Mitra Tauk at 01-350000 ext. 2514, or titleix@aub.edu.lb. An anonymous report may be submitted online via EthicsPoint at www.aub.ethicspoint.com.*

Detailed course outline

Week	Topic	LO	Assessment	Reading
1/Aug 29 <i>RN/TK</i>	Introduction to the course and to implementation research			Peters et al (2013); Bauer et al (2015)
2/Sept 5 <i>RN</i>	Identifying the implementation gap and developing the implementation research question	LO1 LO2	Participation Assignment 2	Royston (2011)
3/Sept 12 <i>TK</i>	Conceptual frameworks in implementation research	LO5	Participation Assignment 2	WHO, chapter 1 Gila et al (2015); Nilsen (2015)
4/Sept 19 <i>TK</i>	Research methods in implementation science	LO3 LO4	Participation Assignment I Assignment 3	Proctor et al (2011); Loenson et al (2014); O’Cathain et al (2010)
5/Sept 26 <i>TK</i>	In class application on data analysis	LO7	Assignment I	
6/Oct 3 <i>TK</i>	First assessment : In class exercise (data analysis in the computer lab)	LO7	Assignment I	
7/Oct 10 <i>TK</i>	Understanding systems, identifying stakeholders and health system actors	LO6	Participation Assignment 2	Tomoaia-Cotisel et al (2013); Grimshaw et al (2012)
8/Oct 17 <i>RN</i>	Implementation strategies and interventions <i>Discuss instructions of the final paper</i>	LO8	Participation Assignment 3	Powell et al (2012); Proctor et al (2013); Waltz et al (2015)
9/Oct 24 <i>Online</i>	Application on understanding systems, identifying stakeholders and health system actors and identifying implementation strategies	LO6	Participation Assignment 2	TBA
10/Oct 31 <i>RN</i>	Case study -Integrated Community case management in Malawi	LO8	Participation Assignment 3	Callagan-Koru(2012)
11/Nov 7 <i>RN</i>	Sustainability and scaling up	LO8	Participation Assignment 3	Yamey (2012); Milat et al (2015)
12/Nov 14 <i>RN</i>	Ethical considerations in implementation research	LO9	Participation Assignment 3	Gopichandran et al (2016)
13/Nov 21 <i>Online</i>	Online application-case study			TBA
14/Nov 28 <i>RN/TK</i>	Guest lecturer	All		
14/TBA	Presentations			

RN/TK				
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Full reference for readings – organized by week

Session 1/2: Implementation Research: Introduction

- Peters D, Adam T, Alonge O, Agyepong I and Tran N. 2013. Implementation research: what it is and how to do it *BMJ* 347:f6753
- Bauer, M. S., Damschroder, L., Hagedorn, H., Smith, J., & Kilbourne, A. M. (2015). An introduction to implementation science for the non-specialist. *BMC Psychology*, 3(32), 1–12. 3.
- Royston G. Meeting global health challenges through operational research and management science. *Bulletin of the World Health Organization*. 2011;89(9):683-8

Additional recommended reading:

- Rabin et. al Glossary for dissemination and implementation research in health *J Public Health Management Practice*, 2008, 14(2), 117–123

Session 3: Overview of Conceptual Frameworks in implementation research

- World Health Organization/TDR. *Implementation Research Toolkit*. Look through entire manual; read Introduction and Chapter 1.
<http://www.who.int/tdr/publications/topics/ir-toolkit/en/>
- Gila Neta, PhD, Russell E. Glasgow, PhD, Christopher R. Carpenter, MD, MSc, Jeremy M. Grimshaw, MBChB, PhD, Borsika A. Rabin, PhD, MPH, Maria E. Fernandez, PhD, and Ross C. Brownson, PhD Framework for Enhancing the Value of Research for Dissemination and Implementation
- Nilsen, P. (2015). Making sense of implementation theories, models and frameworks. *Implementation Science*, 10(53), 1–13. 5.

Additional recommended reading:

- Tabak, R. G., Khoong, E. C., Chambers, D. A., & Brownson, R. C. (2012). Bridging research and practice: Models for dissemination and implementation research. *American Journal of Preventive Medicine*, 43(3), 337–350.

Session 4: Research Methods in implementation science

- Proctor, E. K., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G. A., Bunger, A., Hensley, M. (2011). Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(2), 65–76. 4.
- Loenson R, Laurell AC, Hogstedt C, D’Ambruosos L, Shroff Z (2014) Participatory action research in health systems: a methods reader. TARSC, AHPSR, WHO, IDRC Canada, EQUINET, Harare.
- O’Cathain A E Murphy and J Nichol 2010. Three techniques for integrating data in mixed methods studies. *BMJ* 341 c4587.

Session7: Understanding Systems and Identifying Stakeholders

- Tomoia-Cotisel A, Scammon D, Waitzman N (2013) Context matters: the experience of 14 research teams in systematically reporting contextual factors important for practice change. *Annals of Family Medicine* , 11, (suppl 1), S115-S123.
- Grimshaw, J. M., Eccles, M. P., Lavis, J. N., Hill, S. J., & Squires, J. E. (2012). Knowledge translation of research findings. *Implementation Science*, 7(50), 1–17.

Session 8: Implementation strategies and interventions

- Powell, B. J., McMillen, J. C., Proctor, E. K., Carpenter, C. R., Griffey, R. T., Bunker, A. C., ... York, J. L. (2012). A compilation of strategies for implementing clinical innovations in health and mental health. *Medical Care Research and Review*, 69(2), 123–157.
- Proctor, E. K., Powell, B. J., & McMillen, J. C. (2013). Implementation strategies: Recommendations for specifying and reporting. *Implementation Science*, 8(139), 1–11.
- Waltz et al. Innovative methods for using expert panels in identifying implementation strategies and obtaining recommendations for their use. *Implementation Science* 2015, 10(Suppl 1):A44

Session 11: Sustainability and scaling up

- Yamey, G. (2012). What are the barriers to scaling up health interventions in low and middle income countries? A qualitative study of academic leaders in implementation science. *Implementation Science*, 8(11), 1–11.
- Milat, A. J., Bauman, A., & Redman, S. (2015). Narrative review of models and success factors for scaling up public health interventions. *Implementation Science*, 10(113), 1–11.

Additional recommended readings:

- WHO (2009). A practical guide for scaling up health service innovations.
- WHO (2010). Nine steps for developing a scaling-up strategy.

Session 12: Ethical considerations in implementation research

- Gopichandran et al. Developing the ethics of implementation research in health. *Implementation Science* (2016) 11:161

Appendix –I Mapping of Course Learning Objectives to CEPH Competencies

	L01	L02	L03	L04	L05	L06	L07	L08	L09	Other CORE and/or Concentration courses	Assignment where Competency primarily assessed
HPCH-CC 1					X					HPCH 334 HPCH 333 HPCH 331	
HPCH-CC2	X	X	X	X	X	X	X	X		HPCH 334 HPCH 333	
HPCH-CC3							X			HPCH 334 HPCH 333	
HPCH-CC5									X	HPCH 334 HPCH 333 HPCH 331	
CEPH CC2											
CEPH-CC 6											
CEPH-CC 9											
CEPH-CC 11											

A = Distinct competency is primarily assessed in my course

I = Distinct competency is only Introduced in my course but assessed in another course

R = CEPH core competency or Distinct concentration competency is reinforced in my course